

WHAT IS CLAIMED IS:

1. A moving picture decoding apparatus comprising:
a header information capture section receiving video stream signals
of plural channels compression-encoded in digital signals to extract header
information associated with a decode processing amount in each of said
5 plural channels,

a determination section estimating said decode processing amount in
each of said plural channels according to said header information to
determine a reproduction scheme; and

10 a decoding section receiving said video stream signals of said plural
channels to perform one of normal reproduction and simple reproduction
less than said normal reproduction in processing amount in each of said
plural channels according to an output of said determination section.

2. The moving picture decoding apparatus according to claim 1,
wherein

each of said video stream signals is a signal compression-encoded by
one of the MPEG method and the JPEG method, and

5 said header information includes the number of dots in a picture in a
sequence header added prior to a group of pictures included in each of said
video streams.

3. The moving picture decoding apparatus according to claim 1,
wherein

each of said video stream signals is a signal compression-encoded by
one of the MPEG method and the JPEG method, and

5 said header information includes a frame rate in a sequence header
added prior to a group of pictures included in each of said video streams.

4. The moving picture decoding apparatus according to claim 1,
wherein

said decoding section includes

5 a first change-over section changing over said video stream signals
inputted, according to an output of said determination section;
a normal decoding section receiving one of said video stream signals
from said first change-over section to perform said normal reproduction;
and
10 a simple decoding section receiving one of said video stream signals
from said first change-over section to perform said simple reproduction.

5. The moving picture decoding apparatus according to claim 1,
further comprising

5 a display section receiving an output of said decoding section to
display plural split screens corresponding to said plural channels in one
screen.

6. The moving picture decoding apparatus according to claim 1,
wherein

each of said video stream signals is a signal compression-encoded by
one of the MPEG method and the JPEG method, and

5 said simple reproduction includes 4 x 8 IDCT processing performing
inverse discrete cosine transformation using 4 x 8 orthogonal
transformation coefficients obtained by removing a higher horizontal
frequency portion from 8 x 8 orthogonal transformation coefficients.

7. The moving picture decoding apparatus according to claim 1,
wherein

each of said video stream signals is a signal compression-encoded by
one of the MPEG method and the JPEG method, and

5 said simple reproduction includes processing extracting and decoding
data of intra-frame coded pictures in a group of pictures contained in said
video stream signals.

8. The moving picture decoding apparatus according to claim 1,
wherein

5 said determination section determines said reproduction scheme according to order of priority determined corresponding to each of said plural channels.

9. The moving picture decoding apparatus according to claim 8, wherein

5 said determination section, when said decode processing amount estimated exceeds a predetermined value, changes setting such that simple reproduction is performed in a channel of the lowest priority among channels in which said normal reproduction is set to be performed in estimation, and again estimates said decode processing amount.

10. The moving picture decoding apparatus according to claim 8, wherein

5 priorities of said plural channels are determined corresponding to respective screen display modes thereof and a higher priority is assigned to a channel with a larger display area.

11. A moving picture decoding method comprising:

a step of extracting header information associated with a decode processing amount in each of plural channels by receiving video stream signals of said plural channels compression-encoded in digital signals;

5 a step of estimating said decode processing amount in each of said plural channels according to said header information to determine a reproduction scheme; and

10 a step of performing, by receiving said video steam signals of said plural channels, decode processing in one of normal reproduction and simple reproduction less than said normal reproduction in processing amount in each of said plural channels according to said reproduction scheme.

12. The moving picture decoding method according to claim 11, wherein

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said step of performing decode processing includes
a step of selecting reproduction methods for said video stream signals
5 inputted, according to said reproduction scheme,
a step receiving one of said video streams to perform normal
reproduction, and
a step receiving one of said video streams to perform simple
reproduction.

13. The moving picture decoding method according to claim 11,
wherein

said step of estimating determines said reproduction scheme
according to priorities determined corresponding to said respective plural
5 channels.

14. The moving picture decoding method according to claim 13,
wherein

said step of estimating, when said decode processing amount
estimated exceeds a predetermined value, changes setting such that simple
5 reproduction is performed in a channel with the lowest priority among
channels in which said normal reproduction is set to be performed in
estimation, among said plural channels to again estimate said decode
processing amount.